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This index covers all technical items - papers, correspondence, reviews, etc. that appeared in this periodical during 2001, and items from previous years that were commented upon or corrected in 2001. Departments and other items may be also covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Subject cross-references are included to assist in finding items of interest. Note that the item title is found only under the primary entry in the Author Index.

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Ghogho, M., A. Swami, and T.S. Durrani. Frequency estimation in the presence of Doppler spread: performance analysis; *T-SP Apr 01* 777-789
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